DOCUMENT RESUME

ED 143 855 08 CE 012 484

TITLE Curriculum Development in Occupational Exploration.
INSTITUTION Tarboro City Schools, N.C.
SPONS AGENCY Bureau of Occupational and Adult Education (DHEW/OE), Washington, D.C.; North Carolina State Dept. of Public Instruction, Raleigh. Occupational Research Unit.
PUB DATE Jun 77
NOTE 61p.; Best copy available

EDRS PRICE MF-$0.83 HC-$3.50 Plus Postage.
DESCRIPTORS *Career Exploration; Classroom Games; *Curriculum Development; Educational Objectives; Instructional Materials; *Junior High Schools; *Material Development; *Occupational Clusters; Program Descriptions; Program Evaluation; Teaching Guides; Vocational Development

ABSTRACT

A project conducted by Tarboro City Schools (North Carolina) involved the development of an individualized curriculum, suitable for students in grades 7, 8, and 9. Emphasis for the project was on using the most effective components of different approaches from across the State to meet the State's goals for occupational exploration, while providing organized experiences for the student. The project consisted of eight steps: The development of goal statements; the compilation of a list of occupations for each of 15 selected occupational clusters; selection of a sample of occupations which represented favorable employment opportunities and various levels of training and educational requirements; correlation of the developed goal statement with the selected occupations; the development of appropriate learning experiences for each of the occupations; the pilot testing and revision of the developed curriculum; the field testing and revision of the developed curriculum; and the dissemination of the developed curriculum. The project resulted in a curriculum consisting of 144 study units, 47 information board games, and a comprehensive teacher's guide. This report of the project includes a sample study unit, a teacher evaluation form, list of selected occupations, and other curriculum related material. (SH)

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CURRICULUM DEVELOPMENT IN OCCUPATIONAL EXPLORATION

BEST COPY AVAILABLE

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Tarboro, North Carolina

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A Research Project Conducted Under The Auspices Of

The Occupational Research Unit,

North Carolina State Department Of Public Instruction

Funding Authority:

Title I, Part C, Section 131(b)

Vocational Education Amendments Act of 1968

P.L. 90 - 576

2

June, 1977

CE 012 454

ACKNOWLEDGEMENTS

In developing this curriculum, assistance was received from numerous individuals. We would like to express our appreciation for their assistance, and contributions to this effort.

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Without the contributions of the above individuals and agencies this curriculum would have been impossible to develop. So, again, a word of "thanks" to all who were involved.

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PREFACE

Since the beginning of occupational exploration in 1969, teachers, administrators, state department staff members, and teacher educators have been experimenting with diverse techniques and materials aimed at achieving the goals of exploration. During this time, numerous materials and implementation procedures had been devised. Some of the devised materials relied mainly on hands-on type activities, while others were primarily guidance programs with an emphasis on self-appraisal. In most cases, job information was available, but was not always used in conjunction with the learning experiences.

Much of the above-mentioned materials were very good. Some were not so good. The main problem, however, seemed to be the great diversity of the materials developed and the ensuing problem of implementation.

A curriculum was needed which would include the most effective components of these different programs and meet the goals of occupational exploration while providing organized experiences for the student.

In 1974, the Occupational Research Unit of the State Department of Public Instruction requested project proposals from local educational agencies interested in the development of an individualized curriculum, suitable for students in grades seven, eight, and nine. On-site visits were made to those units submitting project proposals. A team composed of representatives of the Occupational Research Unit and consultants from the Pre-Vocational Education Staff selected Tarboro City Schools as the project site. The teachers, who had several years' experience in an occupational exploration program served as a writing team with the Research Coordinator.

The curriculum development process consisted of eight steps:

1. The development of goal statements,

2. The compilation of a list of occupations for each of the 15 occupational clusters,
3. The selection of a sample of occupations which represented favorable employment opportunities and various levels of training and educational requirements,
4. The correlation of the developed goal statements with the selected occupations,
5. The development of appropriate learning experiences for each of the occupations,
6. The pilot testing and revision of the developed curriculum,
7. The field testing and revision of the developed curriculum, and
8. The dissemination of the developed curriculum.

The above-mentioned process produced a curriculum consisting of one hundred forty-four study units, forty-seven information board games, and a comprehensive Teacher's Guide. Within this curriculum is found a systematic approach to occupational exploration, using the most effective components of the different approaches from across the state to meet the state's goals for occupational exploration. Although this curriculum was designed to be used with a regular exploration program that uses the systematic approach to achieving the goals of exploration, it still possesses the flexiblity to be used in different situations.

CURRICULUM DEVELOPMENT IN OCCUPATIONAL EXPLORATION

Occupational exploration, as we know it today, had its beginning in 1968 when the Congress unanimously passed the Vocational Education Amendments Act (P.L.90 - 576).which emphasized "establishing, operating, or evaluating exemplary programs" which "broaden occupational aspirations and opportunities for youth." These programs or projects include "those designed to familiarize elementary and secondary school students with the broad range of occupations for which special skills are required and the requisites for careers in such occupations..."

As a result of the 1968 Act, and both official and public opinion, the Committee on Occupational Exploration in the Public Schools of North Carolina was formed. This committee was established to investigate occupational exploration opportunities in the junior high and middle grade areas. Its task was to determine the needs of occupational exploration and to formalize alternative approaches to satisfy these needs.

In January 1970, using many of the ideas and strategies formulated by the above-mentioned committee, pilot programs were begun across the state. However, because of the generally stated guides formalized by the committee, each of the pilot projects soon assumed very diverse techniques, objectives and activities. This diversity proved to be beneficial in the beginning, for it allowed for a great deal of experimentation with numerous approaches and techniques. Many ideas and techniques from this experimentation are being used today.

After a number of years of teachers and administrators exploring techniques of occupational exploration, the state Pre-Vocational Education staff compiled a guide containing recommendations and suggestions to be used by on-going, new, and planned programs of occupational exploration.

Research projects, such as the Sanford Project and the Caldwell Project, proved to be very helpful in providing new and better strategies for exploration. However, the problem with the great diversity in programs across the state still existed.

It was felt that some type of curriculum was needed which would extract the most effective components and techniques from the diverse programs across the state and provide organized, individualized experiences for the students. These experiences were to also meet the goals of occupational exploration.

With these problems in mind and with the desire of coming up with a curriculum as previously described, the Occupational Research Unit of the State Department of Public Instruction in cooperation with the Pre-Vocational Education Staff of the SDPI, requested project proposals from local educational agencies across the state.

One of the LEAs submitting a proposal was the Tarboro City Schools in Tarboro, North Carolina. If chosen, the research and writing staff would be housed at C.B. Martin Junior High School. C.B. Martin is the only junior high school in Tarboro. The school was comprised of grades seven, eight, and nine with approximately 850 students. The seventh and eighth grades were involved in the occupational exploration program.

The program at the seventh and eighth grade levels consisted of four occupational exploration labs and an occupational information center (See Appendix A).

The five occupational exploration teachers at C.B. Martin were constantly planning and working together to give students relevant occupational information, self-appraisal, and exploratory learning activities related to the 15 occupational clusters.

The teachers were also using many of the techniques which they would later modify and supplement in devising a new curriculum. All learning experiences

were immediately followed up in the occupational information center, thus reinforcing the relationships between a particular learning activity and a related occupation.

The school had a very active Career Exploration Club involving all students enrolled in the occupational exploration program. The club had helped create a high level of student enthusiasm.

The program was fortunate to have the total support of the Tarboro City Board of Education and both the former and present superintendents. The support of the principal and teachers at the school was excellent. Both past and present staff members have been able to work in a very cooperative, enthusiastic manner, therefore, forming an effective and strong working relationship.

There was also considerable community support for the program. All aspects of the program had been publicized since its inception, three years prior to the writing of the proposal. Many parents and interested members of the community had visited the program. The program had access to advisory people from the area and much cooperation with local industries and businesses.

Upon reception of the proposals submitted by the different local educational agencies, including Tarboro's proposal, a team composed of representatives of the Occupational Research Unit and consultants from the Pre-Vocational Education Staff chose Tarboro as the project site. This site was responsible for the development, pilot-testing, and revision of a system of individualized instruction for occupational exploration appropriate for grades seven, eight, and nine. The instructional materials developed were to conform to the basic program guide as set forth in the document, "A Guide For Designing and Implementing a Middle Grades Occupational Exploration Program." In addition, the materials developed were to conform to basic standards and guidelines of curriculum

development embraced by the Division of Vocational Education of the State Department of Public Instruction. The materials were to utilize a variety of approaches to learning and be supplemented by appropriate multi-media materials. The curriculum materials were to provide a system of individualized instruction.

Curriculum Developmental Procedures

The curriculum development project began in October, 1974 and was to extend through the Summer, 1976. The project had a two-year budget of $88,588.

The staff consisted of a Project Director, a Research Coordinator, a Para-Professional, and five occupational exploration teachers. Of these eight staff members, only the Research Coordinator's and the Para-Professional's salaries were paid out of the project budget. However, some of the occupational exploration staff were paid out of the project budget during the summer months.

The staff began by evaluating the procedural techniques necessary to obtain its proposal goals. This was accomplished through the assistance of members of the Occupational Research Unit and the Pre-Vocational Education Staff.

For the first three months, the staff spent most of its time researching information and products which dealt with individualized instruction. Visits were made by the staff to the Caldwell County and Sanford/Lee School systems to view the techniques in use in these individualized instruction systems. The CAST and PALS programs in the Pontiac School Systems, Pontiac, Michigan, were also visited. These visits provided numerous ideas to aid in the staff's developmental endeavor.

The staff then began to work on the most important component of the entire curriculum, the goals and objectives. This process often seemed to drag on, but,

the time spent in planning proved worthwhile. It involved approximately seven months of research, meeting, revision, and editing before the final objectives were developed.

A thorough study was made of A Guide For Designing and Implementing a Middle Grades Occupational Exploration Program and Exploring the World of Work Grades 6-9, which is the report of a committee established in 1968 to investigate current, occupational exploration opportunities in the junior high grades. As a result of these meetings and publications, lists of the components for occupational exploration programs and the needs of middle grades students were compiled. From these lists of components and needs, the staff formed a list of behavioral objectives upon which to develop the curriculum.

Within eight months of indepth meetings and thorough research, the writing staff composed the four goal statements around which it would begin to develop its curriculum. (See Appendix B)

Also during this time a study conducted by the Pre-Vocational Education Staff and the Curriculum Design and Evaluation Unit of the State Department of Public Instruction had been completed. The study pinpointed twenty-six essential components of occupational exploration programs. The writing staff compared its developed goal statements for exploration with the twenty-six components and concluded that the components were contained in the goals the staff had written.

Once the goal statements had been developed, the next step was to determine what should be taught and how. To do this, the staff found that it would have to identify occupations within each of the 15 occupational clusters. Occupational titles were gathered from sources, such as Occupational Outlook Handbook and the National 1970 Employment and Projected 1980 Requirements By Occupation. This list of occupations was then placed on the Occupational Selection Chart (See Appendix C) along with information about employment levels, employment trends, and training required.

The staff then selected a sample of occupations representing favorable employment opportunities and requiring various levels of training. The staff also made the selection inclusive of all areas of North Carolina and refrained from localizing the occupational selection procedure.

In the selection of occupations, it was the staff's initial intention to select ten occupations from each cluster. The final selections were achieved by choosing occupations with favorable employment opportunities, various levels of training and varied work characteristics from the Occupational Selection Chart. The following selection formula determined the number of occupations selected by education or training required:

- 1 in the dropout category
- 4 in the high school graduate category
- 2 in the apprenticeship category
- 2 in the technical or community college category
- 1 in the college category

However, it soon became evident that the above selection procedure could not be followed. One reason was that enough information to write a complete study unit on an occupation could not be found in some clusters. Another problem was that figures were not available on the number of workers in certain occupations. Therefore, in actual practice, six to twelve occupations were selected for each cluster, using the aforementioned formula. (See Appendix D)

After selecting the occupations, the staff matched them with objectives. The selected occupations were placed on the Occupation/Objective Correlation Chart (See Appendix E). This chart had four categories which represented the goals of occupational exploration. Under each category were columns which represented performance objectives dealing with the attainment of each goal. Wherever possible, one performance objective from each of the four goal categories was

selected for each occupation. This insured that each cluster of jobs would be related to the four major goals of exploration.

Each objective was carefully examined to reveal what should be accomplished, and appropriate learning experiences for the occupations were included in the unit. This meant that a study unit would enable the student to progress toward achieving the goals of occupational exploration. The learning experiences were grouped according to occupations. In this way, occupations were used as vehicles in reaching the objectives of occupational exploration.

With this achieved, work was begun on the actual development of the study units. The writing staff realized that the students needed realistic, relevant experiences to give them an idea about the actual job situations. To accomplish this, new sources of information had to be obtained to develop these new, relevant experiences.

The staff decided to contact people who were actually in these occupational fields to assist in coming up with ideas for the experiences. Visits and telephone calls were made and letters sent out to workers in the community, state, and nation. Workers, educators, training instructors, supervisors, administrators, employers, companies, and agencies were all contacted to gather information for writing the study units.

Pilot Testing

After each study unit was written, it was used in the classroom to test its relevancy, effectiveness, and student appeal. Out of this pilot testing a number of problems with the units soon came to light.

One problem dealt with the unit construction. The restating of the objectives in each of the four activity sections seemed too repetitive. To combat this problem, the objectives were kept on the first page, and deleted on each of

the following pages. The Roman numerals remained to identify the objective that was being covered.

Another problem involved the low ability students' inabilities to use the units individually because they could not read. To counter this, major portions of the unit were recorded on tape or on sound-on-page. A second method to alleviate this problem was to place the low-ability students in groups or into larger groups using more teacher assistance. Both methods proved successful.

Also, some students were bored because of the repetition within the units. Repetition and all extra, non-essential materials were removed. Colorful drawings were also added. There was an immediate, positive reaction from the students.

The final problem dealt with the gathering of occupational information. The writing staff had chosen two information sources - Occupational Outlook Handbook (OOH) and the Hello, World! series. Both sources were chosen because of the broad range of occupations covered in each. The OOH is published yearly by the U.S. Government Printing Office and was a constant source of reliable, up-to-date, information. The Hello,World! series is an easily, read information source using the personal interview method of providing information. The pictures, situations, and characters are very real and interesting. Filmstrips were also used when available from the occupational information center. However, students sometimes got bored reading the materials and even with the use of cassette-tape presentations. One of the teachers had the idea that since students had always enjoyed any kind of educational game, it might be effective to place job information from sources such as the Occupational Outlook Handbook on a board game. The students not only enjoyed them, but learned from them.

Tests indicated that students were able to answer more job information questions after playing a game than from reading an article on that occupation.

At first, various strategies for introducing the units to the students were tried. Out of the strategies came one which has been most effective in both the pilot-testing and field testing. Exploration teachers explained the characteristics of the cluster itself, and showed an appropriate filmstrip or used a crossword puzzle. They explained each separate study unit and described the learning experiences in each unit. A general discussion was held, after which the students selected the study units they wished to complete. In this manner, even though the students may have completed only half of the available study units in a cluster, they learned about all of the occupations.

By December, 1975, a number of the study units had been developed and pilot tested. The staff, at this time felt the curriculum materials should be evaluated by outside persons with no prior connection to the curriculum's development.

It was felt the curriculum materials should be evaluated by other teachers who were also in occupational exploration programs. In December, the staff members made visits to three different sites:

Jonesboro Middle School in Sanford, North Carolina

Norlina Junior High in Warrenton, North Carolina

Northwoods Park Jr. High in Jacksonville, North Carolina

At these meetings, teachers and administrators from the three facilities viewed the prepared study units, games, and other supportive materials and gave the following reactions:

a. teachers were generally impressed with the study units

b. possibly too much reading

c. units could not always be used because of expense of certain equipment

d. games were considered a big plus

With these general reactions, revision of the completed materials used in the pilot test was begun. The staff also continued to develop new units.

Field-Testing

The staff continued to involve diverse sources of experience. It also met frequently with state consultants and shared information with other occupational exploration teachers in order to check the curriculum's effectiveness. However, the staff felt that it was not effectively achieving the objectivity in the evaluation of the curriculum that would be necessary.

With this in mind, the staff wrote a proposal to request funds to achieve a more objective evaluation. In the proposal, reference was made to numerous examples of instructional innovations, such as programmed instruction, team teaching, and language laboratories, that have shown to be valuable and effective in the setting in which they were developed. Yet, once these same instructional methods were transferred to a new setting, they had met with less success than had been anticipated. In the field test, the curriculum's transferability, goals, and implementations strategies were to be tested. Along with this evaluation, plans for the dissemination of the revised materials were also made.

The project extension entitled, "The Revising, Field-Testing, and Dissemination of Curriculum Materials in Middle Grades Occupational Exploration," was funded for the period July 1, 1976 through July 31, 1977 at a cost of $38,138.

The field-test was designed with the purpose of answering the following major questions:

1. What effect does the individualized instructional system have on student behavior?
2. What is the procedure for installing the individualized instructional system in an on-going school program, and, what problems are associated

with that procedure?

3. How appropriate are the individualized curriculum materials for use in a typical school setting?
4. Is the individualized instructional system compatible with students' and teachers' interests and desires?

By early Spring of 1976, approximately 100 of the study units had been completed. The remaining 44 units were completed during the Summer. These materials were then readied for printing in sufficient numbers for the field testing.

Also, during the Summer, the staff compiled the supplement inserts, answer sheets, and other supporting materials into a Teacher's Guide. Along with these supplemental materials, information on strategies and procedures for implementing the curriculum was provided in the Guide.

During July,1976, members of the Occupational Research Unit, members of the Pre-Vocational Education Staff, and the writing staff selected eight field test sites from applications received from the eight educational districts (See Appendix F). In making the selections, the following criteria were used.

1. Sites were to be representative of :
   a. different regions of the state,
   b. different socio-economic groups,
   c. different class sizes,
   d. various grade-level usage,
   e. urban & rural areas,
   f. various teacher to student ratios,
2. Sites were to have been operating an occupational exploration program for at least one year, and
3. A majority of the teachers were to have been certified in occupational exploration.

In addition, the system and school had to affirm their willingness to cooperate fully in providing an effective field-test.

The schools selected to field-test the curriculum were:

District 1 - Central Jr. High School, Gates County Schools, Gatesville, North Carolina

District 2 - Brogden Jr. High School and Mt. Olive Jr. High School, Wayne County Schools, Dudley and Mt. Olive, North Carolina

District 3 - C. B. Martin Jr. High School, Tarboro City Schools, Tarboro, North Carolina

District 4 - Rockingham Jr. High School, Richmond County Schools, Rockingham, North Carolina

District 5 - Brown Jr. High School, Davidson County Schools, Rockingham, North Carolina

District 6 - Hartsell Middle School, Cabarrus County Schools, Concord, North Carolina

District 7 - Gamewell Middle School and Collettsville Elementary School, Caldwell County Schools, Lenoir and Collettsville, North Carolina

District 8 - Cool Springs School, Rutherford County Schools, Forest City, North Carolina

After informing each of the field-test sites of its selection, arrangements for a three-day in-service workshop in August were made. This workshop was to accomplish the following objectives:

1. to familiarize the field-test participants with the strategies for implementing the developed curriculum,
2. to prepare the participants for setting up facilities in their schools in order to field test the developed curriculum,

3. to provide time to allow teachers to jointly plan the use of the curriculum for the 76-77 school year, and
4. to provide the curriculum materials to the field-test participants for their use and preparation.

Field-test participants were supplied sufficient numbers of copies of the Occupational Outlook Handbook and Hello, World! series.

The in-service workshop was conducted by the writing staff. During the first morning session, strategies for implementing the curriculum were presented. All the needed materials and necessary components were also explained and demonstrated.

During the afternoon session and the following day's session, all the participants went through the three labs where the curriculum strategies, the curriculum materials, and the needed materials were explained and demonstrated.

The field-test participants received the curriculum materials along with other supportive materials at the following morning session. They also worked separately and/or jointly - according to schools- to begin preparing for the implementation of the materials in the field-test.

Field-Test Findings

All of the field-test sites were visited at least twice during the 76-77 school year by the Research Coordinator who checked to see that all implementations strategies were being used. The Research Coordinator also assisted with any problems that arose.

The first evaluations of the units proved to be very favorable. Both students and teachers found the units enjoyable and useful. There also arose some problems. One problem was caused by the failure to have all the curriculum materials printed and readied for the field-test schools. This necessitated shipping and transporting of the curriculum to the sites, which caused some

delay in preparing the curriculum for field-testing.

The lack of preparation time also proved to be a general problem for the field-test sites. A great deal of time was used to prepare game cards, games, to color units, etc.

Another problem involved the initial implementation cost. A few sites had some problems while others experienced no problems. However, once the initial cost was covered, the continuation cost proved to be very minimal.

Others problems noted were the need for :

1. numbered pages in both the Teacher's Guide and study units,
2. answer keys,
3. modification of some of the activities by making them more realistic, less complicated and/or less expensive,
4. correction of grammatical errors,
5. simplification and rewording of instructions, and
6. a guidance supplement.

Along with these evaluations, formal reports were also received from the field-test sites. The evaluations were gathered from administrators, teachers, and students who had been involved in the field testing. Upon receiving many of evaluations, it became evident that they could also aid in the revision.

These evaluations thus served a dual prupose. They served as a source for revision while answering the question of whether the developed curriculum met the central need sought in the planning and conducting of the research project. The need, of course, was the development of "a curriculum which would include the most effective components of the different occupational exploration programs across the state, and meet the goals of exploration and provide organized experiences for the student."

The reports, concerning the achievement of the above-mentioned need, were

very favorable from all three groups. The first evaluation received was the study unit evaluations. Evaluations on each one of the study units were submitted by teachers. These evaluations were very favorable. The main area of concern was the reading level of the study units. In the final revision , this evaluation proved to be of great importance because it allowed the Research Coordinator to begin evaluation and revision of the study units early in the 76-77 school year.

The administrators were questioned concerning the curriculum's fulfillment of its stated objectives. Of the six responses from principals and local directors of occupational education, five affirmed that the curriculum had achieved the goals. The other respondent was not sure.

The administrators were also asked if the curriculum met the objectives that they felt were important for an occupational exploration program. Three felt it completely met their expectations. Two felt that it met the objectives except for a few minor adjustments. One felt that it did not meet the desired objectives of an occupational exploration program.

Concerning administrative problems arising from the field testing of the curriculum, four of the six responded that it provided no problems. One respondent stated that it provided no major problems; however, it was advised that the curriculum promoters make sure to advise potential adopters of the necessity for a committment of time and materials in getting the curriculum ready for use. The last respondent said that a problem was posed with the funding of equipment and supplies.

When asked what assistance the curriculum had provided to their school or administrative unit, administrators responded with the following statements:

- provided an alternative method of achieving the goals of exploration
- assisted new teachers by providing a pattern or guide around which to

prepare their plan of study for the 1976-77 school year

- provided better organized scope and sequence
- provided a broader outlook of occupations
- provided a structured program which prevented repetition for the students
- assisted new programs to grow at a much faster rate
- saved money by not having to purchase commercial, curriculum materials

Administrators also identified the following possible weaknesses that the curriculum seemed to possess:

- reading level possibly too high for poor readers
- need more hands-on activities
- large amount of paper work for teachers
- the fact that all materials utilize the same formats could present a motivational problem
- lacks comprehensive guidance component; hence, it might not provide for a real understanding of the career planning process
- lack of consumer and economic information and experiences
- occupational information sources need to be of a more standard nature and availability

The strengths of the curriculum as seen by the administrators are as follows:

- allows students to work independently or in small groups progressing at their own rate
- teacher spends less time lecturing and more time with each individual student
- provides occupational and educational information
- utilizes various teaching strategies in presenting the information
- offers exploratory activities in accordance with the career ladder concept
- serves as base for classroom organization and management

- adapts to organizational and managerial systems
- provides a guidance element built into the curriculum
- is uniform
- is flexible to be used as a core curriculum or supplement to existing curriculum
- financial benefits will be realized after the initial investment
- reinforces reading
- units are colorful and attractive
- fairly inexpensive materials and equipment

The administrators were finally asked whether they planned to continue using the curriculum. Only one of the respondents responded that his LEA would not do so. This was the same individual who felt the curriculum did not completely meet its objectives nor his objectives for an exploration program. All others responded that their schools or LEA's would use the curriculum next year. Three respondents planned to expand it or use it in other schools within their units.

The writing staff was very pleased with the evaluations provided by the administrators. This additional information, especially the fact that most schools planned to continue use of the curriculum, reinforced the writing staff's satisfaction with the devised curriculum. The writing staff was able to combat two of the weaknesses of the curriculum by adding a guidance supplement and by adding more hands-on activities during the revision of the materials.

The writing staff was even more pleased with the evaluations provided by the teachers. The teacher evaluations were very supportive of the curriculum components, strategies and objectives.(See Appendix G). Of the nineteen respondents, eighteen teachers stated that the curriculum entirely met its stated objectives. One teacher felt that the goals were not met entirely but

were generally accomplished.

Concerning the question of whether the curriculum met the objectives that the teachers felt were appropriate for an occupational exploration program, eighteen again responded that the curriculum met these objectives. One respondent declined comment because it was her first year and she was not exactly sure.

When asked if their students seemed to enjoy the units, fifteen responded that their students enjoyed the units and four stated that their students felt they were good or O.K.

The strengths of the curriculum as seen by teachers were:

- similar formats for activities aid in accomplishing the objectives
- provides better organization of classes; more structure
- games add interest and increase job information attainment
- students like having a choice of alternatives for getting answers for job information questions
- materials can be used in and related to the academic subject area
- provides "excitement and fun" in the classes
- provides a structured curriculum in all the cluster areas
- speeds up process of our school planned program development
- reinforces academic areas
- materials are attractive
- units are interrelated
- exposes students to a more varied occupational coverage
- saves money by not having to purchase commercial materials
- allows students to work in groups, or independently
- teacher spends less time lecturing and more time with individual instruction
- provides a basic curriculum around which a school can develop and expand their exploration program

- units are adaptable so one can substitute activities for which one has equipment
- problem solving and decision making strategies are beneficial to students
- objectives are clear-cut and understandable
- develops positive attitudes within students
- creates interest in jobs in the "World of Work"
- helps in development of good self-concept
- encourages serious thought about student's occupational future
- uses most of the equipment already available
- increases student cooperation
- students accept responsibility more readily
- uses inexpensive equipment
- covers many guidance components usually necessitating a guidance counselor

The weaknesses as noted by teachers were as follows:

- necessity of extended preparation time
- initial cost is great
- does not allow us to use our equipment
- students must do a great deal of written work
- reading of units is boring to low level students
- some hands-on activities are difficult for certain students
- students have some problems with cross-references of materials
- activities are too much alike
- reading level handicaps poor readers

Of the nineteen teachers who returned the evaluation, all planned to use the curriculum during the next school year. Some planned to supplement the materials with activities of their own for which they had equipment.

The final evaluation source was the students who used the developed curriculum. Of the approximately 3,500 students who participated in the field testing, 2,672 students completed the Student Evaluation Form. These evaluations were obtained from the ten schools which were involved in the field testing, plus one additional school from Cabarrus County. A summary is presented in Table 1.

Table 1. Student reaction to study units by grade level in field-test sites.

Item	Percentage "Yes" Response		
	Grade 7 (N=1336)	Grade 8 (N=1297)	Grade 9 (N=40)
1. Have you enjoyed participating in occupational exploration this year?	91.5%	90.0%	100.0%
2. Could you follow the directions in the study units?	95.0	93.9	100.0
3. Would you say the activities in the study units were interesting?	89.4	85.5	100.0
4. Thus far, are you happy with what you have learned in the labs?	92.9	91.1	94.7
5. Did you enjoy the different ways of getting job information?	90.1	88.1	100.0
6. Were you able to learn more about yourself, and the world of work?	90.8	89.1	97.2
7. Did you enjoy working in groups?	90.8	93.2	90.0
8. Did you enjoy working alone?	46.9	48.8	88.6
9a. I know what my interests are.	84.8	84.3	59.5
9b. I know what some of my abilities are.	88.1	85.1	81.1
9c. I have begun to set my goals of life.	60.6	67.3	56.8

Table 1. (cont'd)

Item	Percentage "Yes" Response Grade 7 (N=1336)	Grade 8 (N=1297)	Grade 9 (N=40)
9d. I now have a better idea of what kind of work would most interest me.	85.2	83.5	70.3
9e. I feel that who I am is important to how I relate or get along with others and work.	88.2	85.6	78.4
9f. I feel that I can make good decisions toward my future.	82.1	86.1	78.4
9g. I feel that I can do problem solving.	72.5	76.1	59.5
9h. I have begun to accept responsibility in doing my lab tasks and in handling everyday responsibilities outside of class.	82.3	78.9	59.5
9i. I realize the importance of choosing a job that fits my needs, interest, abilities, and goals.	89.8	84.1	67.6
9j. I understand that I need to plan my education according to the kind of work I would like to do.	88.3	89.7	64.9

In reviewing the student-evaluation for the first six questions, over ninety percent of the students answered "yes" to those questions involving their enjoyment of the curriculum; the ability to follow directions; the ability for the curriculum to be interesting; the satisfaction of their lab learning achievements; the enjoyability of the different ways of getting job information; and, the ability to learn more about oneself and the world of work.

Questions seven and eight involved the students' enjoyment of working together or working alone. Reports from the seventh and eighth grade respondents were very similar. For question number seven, over 90% of the students responded

"yes" to the question of whether they enjoyed working in groups. However, in question eight, student reaction was somewhat different. When asked if they enjoyed working alone, just slightly more than 50% stated "no", that they did not enjoy working alone, while just less than 50% stated "yes."

These findings seem to reinforce the Teacher's Guide advised strategy of implementing the curriculum in small groups. Care should be taken in requiring students to work alone since 50% stated that they did not enjoy working alone. This does not rule out the curriculum's individual use by students since over 49% also said they enjoyed working alone. Nor does it imply that the curriculum's attempt at developing an individualized curriculum has not been achieved. Rather, it seems to have reinforced a fact that parents, teachers, administrators, and psychologists have known for years: it is usually more enjoyable to work with someone than to work alone.

Data was also collected on the ninth grade students who field tested the curriculum. However, because of the small number of returned Student Evaluation Forms; it would seem that such data should be interpreted cautiously. However, from returned data, over 90% of the ninth grade students enjoyed working in groups and 89% stated that they enjoyed working alone.

Question nine of the Student Evaluation Form involved the attainment of certain components of the goal statements around which the curriculum was developed. Students were provided a list of ten statements concerning the goals of the curriculum. The students were to check those statements or achievements which they felt they had gained or learned through working with the study units.

In considering the returns, the writing staff projected an 80% selection for a component to be considered gained. Of the ten components, eight received 80% or higher selection by the seventh and eighth graders. Of these eight, four received 85% selection or higher. Those receiving 85% selection or higher were:

- I know what some of my abilities are.
- I feel that who I am is important to how I relate or get along with others and work.
- I feel that I can make good decisions toward my future.
- I understand that I need to plan my education according to the kind of work I would like to do.

The other four receiving 80% or higher selection were:

- I know what my interests are.
- I now have a better idea of what kind of work would most interest me.
- I have begun to accept responsibility in doing my lab tasks and in handling everyday responsibilities outside of class.
- I realize the importance of choosing a job that fits my needs, interests, abilities, and goals.

As one can tell, these eight components comprised the major portion of the curriculum's four goal statements.

The two components which did not reach the 80% selection level were "I have begun to set my goals in life" (65%) and "I feel that I can do problem solving." (73%) The first component, dealing with the beginning of setting goals in life, was considered important by the writing staff.

With this in mind, activities and learning experiences were added into a guidance supplement that would assist in the attainment of this component. Some of these activities and learning experiences were tested with satisfactory success at the writing facility by the occupational information specialist. If tested again, this component would probably rank higher in its selection percentage.

The second component dealt with the student's ability to do problem solving. In an attempt to improve this component's effectiveness, the Teacher's Guide inserts concerning problem solving were significantly altered. It was then tested at the writing facility in both seventh and eighth grade classes with a

more favorable reaction. The new insert was also evaluated by the field-test teachers who found it to be a better illustration of problem solving and decision-making. Learning experiences and activities were also added into the before-mentioned guidance supplement to further increase the effectiveness of this component of the curriculum. Along with these student evaluations were explanations of some of their choices. Some of the explanations were very helpful in evaluating the curriculum as shown by the following student statements.

- I found out that I knew more than what I thought.
- I started learning to get ready for my future.
- It showed me what careers I enjoy.
- I like making things.
- I have learned about what kind of work I want to do before I get into the world.
- I know now I like to work with my hands.
- I now know what responsibilities I have to face.
- The activities teaches you things and then when you older, you'll know what to do.
- Well, I thought it was fun and I learned all about careers.
- I don't think I tried hard enough. I would like another shot at it.

As one can gather from the above statements, the curriculum had begun the overall objective of getting students to begin evaluating themselves and planning for their future in the world of work. It also shows some in-depth evaluations of their present status.

Final Revision

Throughout the 76-77 school year, the writing staff was constantly revising the curriculum. The revision was aided by the information gained by the Research Coordinator's visits to the field-test sites along with correspondence, telephone

calls, and other contacts with the field-test participants. Another source of revision information was from the writing staff's own field-testing of the materials. The final source of information was evaluation forms completed by the field-test sites.

In the Spring of 1977, it became evident that a follow-up would be necessary to accomplish a successful revision. A two-day, follow-up workshop was planned for the last of April. This workshop would accomplish the following objectives:

1. to further evaluate the curriculum,
2. to make suggestions to improve the curriculum,
3. to discuss curriculum dissemination strategies, and
4. to begin the final revision of the curriculum.

The workshop was organized and carried out by the writing staff. All field-test participants scheduled these two days to make sure they covered sessions on each cluster they taught. They also participated in sessions covering all components in the curriculum. During these sessions, new revisions were discussed along with other possible revisions.

With the information gained during the field-testing and the follow-up workshop, the writing staff began its last revision of the curriculum. This proved to be a very exhaustive process. This revision involved the complete rewriting of sections of certain units and parts of the Teacher's Guide.

Products Produced

The basic component of the curriculum is the study units (See Appendix H). These study units represent 144 occupations within the 15 occupational clusters. The first section consists of a general introduction to the occupation. It is designed to be informative and stimulating to assist the student in deciding whether or not to explore this occupation. It also contains a listing of behavioral

objectives which the student will be attempting to accomplish in the completion of the study unit. These objectives are listed by Roman numerals, thus forming an outline for the following four sections which constitute the body of the units. Each of these objectives involves the attainment of one of the "goal statements" upon which the curriculum has its origin.

Within the next four sections are found the methods of accomplishing the behavioral objectives. These sections correspond to the objectives which they attempt to achieve, thus allowing both the teacher and students to assess their accomplishment of the stated objectives.

The objectives are accomplished through a variety of activities and methods. Job information is usually achieved through anagrams, puzzles, word finds, card games, or job information board games. Information is also gathered through research sources such as the Occupational Outlook Handbook or the Hello,World! series.

The goal of identifying and developing interests, abilities and goals as related to occupational choice is achieved through simulated, occupational tasks, which provide an overt identification or development of this objective. The use of both teacher-made and commercially designed tests and questionnaires also aid in the attainment of this goal.

The development of positive student attitudes toward themselves, others, and work is accomplished through the use of positive attitude guides, participation in role-playing situations, and completion of cartoon situations.

The final goal of developing the abilities to make decisions, solve problems, and accept responsibilities is achieved through the use of curriculum guides. Students also participate in simulated, occupational tasks. This involves the concept of "learning by doing." Other strategies involve role-playing and the completion of cartoon situations.

The units have also been provided with drawings and diagrams to break the monotony of the reading content. These drawings can be colored to make the units more attractive. The study units can then be placed in plastic sleeves or laminated and placed in brief covers for long-term use.

The second major component of the curriculum is the 46 board games. These games consist of 41 information board games covering 41 specific occupations and five general information board games. Cards for the games can be prepared from information found in the Teacher's Guide. Both types of games are printed on twenty-two inch square sheets. The games can be mounted on a hard backing and covered with clear contact paper.

The last curriculum component is a comprehensive Teacher's Guide. The Guide's Preface and Acknowledgements sections provide information on the development of the curriculum. The Introduction and Games sections provide information on most of the needed materials for implementing the curriculum. These sections include strategies for implementing the curriculum as well as instructions on the preparation and use of all games.

The Supplemental Guidance Component provides information on commercial and teacher-made experience and ideas and activities which can supplement the guidance emphasis of the curriculum.

A special Teacher Guide Insert section covers all of the checklists and the guide sheets to be used in the curriculum. Copies of these sheets are provided so that copies can be reproduced for students.

The Study Unit Instructions and Materials section contains instructions on implementing all activities within each of the study units. This section also contains all answer sheets and keys for the study units in addition to other supportive written materials. Much of this material is to be duplicated and distributed to students.

Summary

From the preceding student, teacher, and administrator evaluations, we, the writing staff, feel we have accomplished the basic objectives which we set out to accomplish in October 1974. However, potential users will find it necessary to evaluate this curriculum in terms of their specific needs.

The reading level of students is very important. If the curriculum is to be used with lower level readers, taping of instructions and/or peer assistance is recommended.

Potential users are also reminded of the curriculum's flexibility. This curriculum can be used in small and large groups, or for individualized instruction. The construction of the curriculum also allows for substitution of experiences which the user deems necessary.

From the compiled data, it is evident that the curriculum can be very effective with both seventh and eighth graders. However, we do not feel we have adequate data to completely evaluate the curriculum's use with ninth graders. During field-testing, the curriculum did work well in ninth grade settings, but required the supplementing of more complicated and / or skill building experiences. We, therefore, feel that the curriculum should be used in conjunction with other teaching strategies for the ninth grade level.

Although designed as a basic curriculum, this curriculum can be used in conjunction with other curricula. In fact, this curriculum was not planned to be an end product; rather, it was designed to provide a core or base around which each LEA could develop learning experiences that relate specifically to its area and occupational availability. By no means, is the curriculum meant to be a static product; but instead, a beginning or guide, leading to further development and refinement.

BIBLIOGRAPHY

Committee on Occupational Exploration in the Public Schools of North Carolina. Exploring the World of Work, Grades 6-9. April, 1969.

Middle Grades Occupational Exploration Staff. A Guide for Designing and Implementing A Middle Grades Occupational Exploration Program. Raleigh: North Carolina State Department of Public Instruction, 1974.

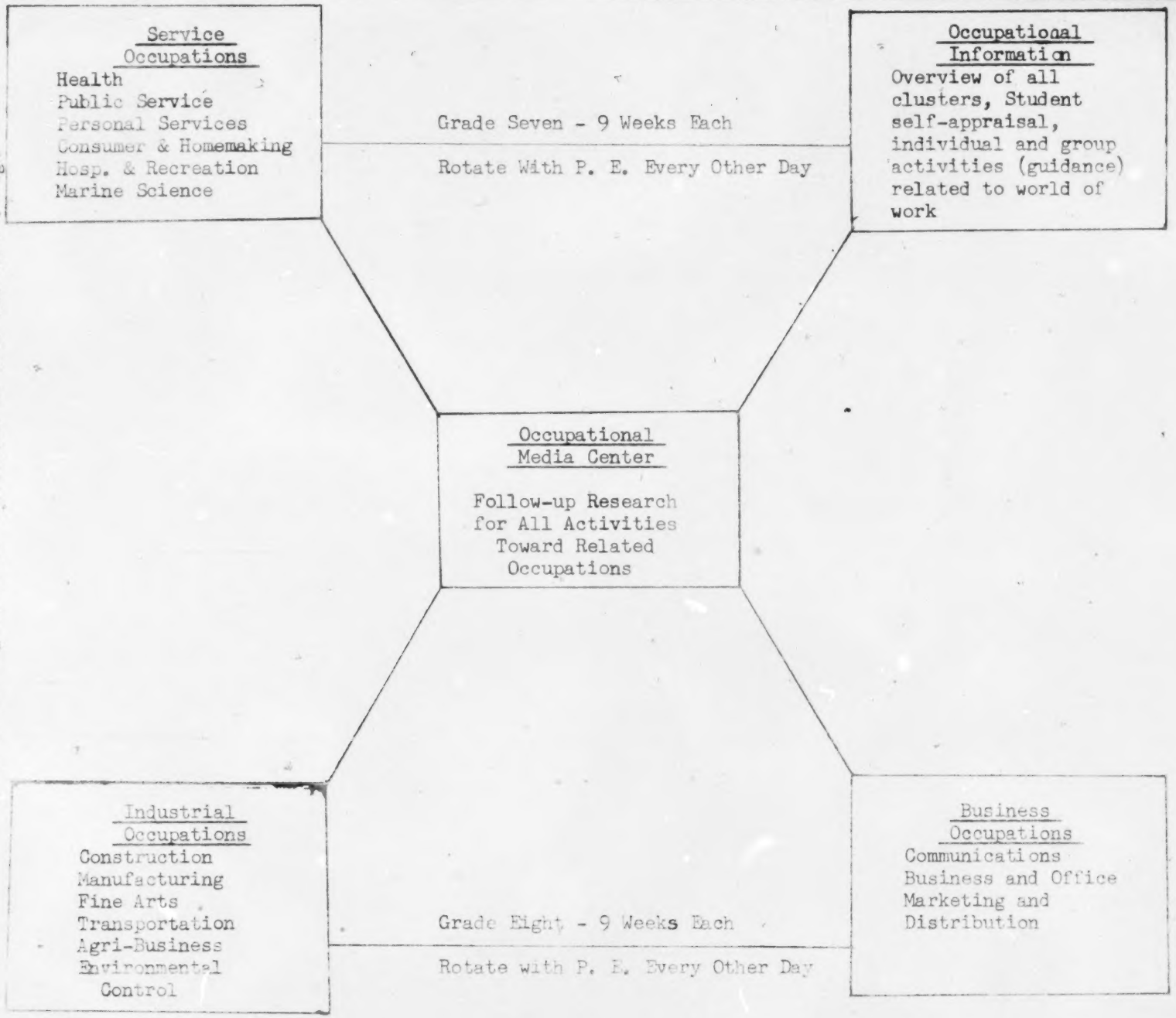
U.S. Department of Labor. National 1970 Employment and Projected 1980 Requirements By Occupations.

Occupational Outlook Handbook. Washington, D.C.: U.S. Government Printing Office, 1974-1975 and 1975-1976.

APPENDIX

Appendix A

Seventh and Eighth Grade Curriculum At C.B. Martin Jr. High



Appendix B

EXPLORATION GOAL

1. Students will identify and develop their interest, abilities and goals as related to occupational choices.

OBJECTIVES

Students will identify their_____ by completing one of, or a combination of the following:

a. a standardized test

b. a teacher made test

c. a teacher designed activity

1.1 -- interests

1.2 -- abilities

1.3 -- goals

Students will develop their_____ by completing one of, or a combination of the following:

a. a standardized test

b. a teacher made test

c. a teacher designed activity

1.4 -- interests

1.5 -- abilities

1.6 -- goals

EXPLORATION GOAL

2. Students will develop positive attitudes toward themselves, others, and work.

OBJECTIVES

2.1 Students will develop positive attitudes toward others as demonstrated by the teacher observing the following behaviors:

A -- cooperating with others

B -- helping others without being asked

C -- agreeing or disagreeing with others without making negative remarks or demonstrating hostility

D -- listening to others without interrupting

E -- using tact in replying to others

F -- sharing ideas freely with others

G -- expressing appreciation to others for their efforts

2.2 Student will develop positive attitudes toward himself as demonstrated by the teacher observing the following behaviors:

A -- the willingness of the student to accept responsibility

B -- the student taking responsibility for what he does

C -- the student taking constructive criticism without reacting negatively

D -- the student following his own ideas or thoughts (not swayed by others who are moving in the wrong direction).

E -- the student diplomatically defending his ideas and rights

2.3 Student will develop positive attitudes toward work as demonstrated by the teacher observing the following within the student:

A -- perseverance C -- pride in work E -- punctuality

B -- reliability D -- industriousness

EXPLORATION GOAL

3. Students will increase their knowledge of job information on which they can act as they consider possible career choices.

OBJECTIVES

3.1 Students will increase their knowledge of job information associated with various occupations as demonstrated by their ability to supply this information either verbally, in written form, or by physical activity.

JOB INFORMATION

A -- approximate salaries or wages

B -- the nature of work

C -- the opportunities for advancement

D -- the places of employment

E -- the employment outlook

F -- the working conditions (environmental, hours, emotional)

G -- the sources of information

H -- the process of applying for a job

3.2 Students will increase their knowledge of the education/training associated with various occupations as demonstrated by their ability to supply this information either verbally, in written form, or by physical activity.

EDUCATION/TRAINING

A -- the skills

B -- the nature of education/training required

EXPLORATION GOAL

4. Students will develop the abilities to make decisions, solve problems, and accept responsibilities.

OBJECTIVES

4.1 -- Students will develop the ability to make decisions as illustrated by the students being able to apply the basic procedures of decision making to a teacher constructed decision making situation.

4.2 -- Students will develop the ability to solve problems as illustrated by the students being able to apply the basic problem solving process to a teacher constructed problem.

4.3 -- Students will develop the ability to accept responsibility as demonstrated by the students accepting and attending to duties and tasks which have been selected for them by the teacher.

Appendix C

OCCUPATION SELECTION CHART

Cluster: Public Service

OCCUPATIONS	Number Employed	Outlook			Training				
		Poor	Good	Excellent	Dropout	High School	Technical	College	Apprentice
Armed Forces	2.4 million		✓			✓			
Kindergarten and Elementary Teachers	1.3 million		✓					✓	
Secondary Teachers	1 million	✓						✓	
College and University Teachers	620,000	✓						✓	
Police Officers	370,000			✓					✓
Lawyer	300,000		✓					✓	
Postal Clerk	286,000	✓							✓
Mail Carrier	263,000		✓			✓			
Guards and Watchmen	250,000					✓			
Firefighter	200,000			✓		✓			
Librarian	125,000		✓					✓	
Social Service Aide	100,000		✓		✓				
State Police Officer	44,000			✓		✓			
School Counselors	43,000		✓					✓	
Health Inspector	25,000			✓				✓	
Construction Inspector	23,000			✓				✓	
Sociologist	15,000		✓					✓	
Meter Readers	37,000		✓						✓
Library Technical Assistant	25,000		✓				✓		
Legal Assistants	20,000		✓				✓		

Appendix D

OCCUPATIONS

Cluster: Agri-Business & Natural Resources

Agronomist
Cattle Feeder
Dairy Farmer
Farm Equipment Dealer
Farm Equipment Mechanic
Grain Buyer
Grain Farmer
Poultry Farmer
Seed Grower

Cluster: Business & Office

Accountant
Bank Clerk
Bank Teller
Bookkeeper
Clerk Typist
File Clerk
Office Machine Operator
Personnel Worker
Public Relations Worker
Receptionist
Secretary
Statistical Clerk

Cluster: Communication & Media

Commercial Artist
Drafter
Lithographer
Newspaper Reporter
Newspaper Space Sales Worker
Photographer
Printing Press Operator
Radio and TV Announcer
Telephone Operator
Telephone Serviceperson

Cluster: Construction

Building Contractor
Carpenter
Civil Engineer
Construction Laborer
Construction Equipment Operator
Electrician
Painter and Paperhangers
Plumbers and Pipefitters
Surveyor
Welder

Cluster: Consumer & Homemaking

Apparel Worker
Comparison Shopper
Consumer Affairs Director
Day Care Worker
Food Technician
Home Extension Agent
Home Furnishing Coord.
Homemaker

Cluster: Environmental

Air Pollution Control Aide
Exterminator
Forestry Aides & Technicians
Garbage Collector
Nursery Worker
Sanitarian
Watershed Tender
Water Treatment Plant Oper.

Cluster: Fine Arts

Architect
Artist
Fashion Designer
Floral Designer
Industrial Designer
Interior Designer
Jeweler
Museum Worker
Musician
Writer

Appendix D (continued)

Cluster: Health

Dental Assistant
Hospital Attendant
Licensed Practical Nurse
Medical Assistant
Medical Lab Worker
Operating Room Technician
Optometric Assistant
Physician
Physical Therapy Aide
Radiologic Technician

Cluster: Hospitality & Recreation

Caterer
Cook
Hotel Housekeeper
Hotel/Motel Front Office Clerk
Hotel/Motel Manger
Park Technician
Recreation Worker
Restaurant Manager
Travel Agent
Waiter/Waitress

Cluster: Manufacturing

Electronic Technician
Engineer
Industrial Machinery Repairer
Inspector
Machinist
Millwright
Patternmaker
Setup Worker
Sewing Machine Operator
Supervisor

Cluster: Marine Science

Boat-Motor Mechanic
Diver
Fish & Wildlife Ass't
Marine Engineer
Merchant Marine Officers & Seamen
Physical Oceanographer
Tugboat Captain
Wildlife Enforcement Officer

Cluster: Marketing & Distribution

Advertising Worker
Automobile Salesworker
Cashier
Credit Worker
Manufacturers' Salesworker
Meatcutter
Model
Purchasing Agent
Real Estate Worker
Stock Clerk
Wholesale Trade Salesworker

Cluster: Personal Service

Appliance Repairer
Building Custodian
Cosmetologist
Funeral Director
Laundry Worker
Upholsterer
Watch Repairer

Cluster: Public Service

Armed Forces Careers
Firefighter
Guards
Elementary School Teacher Kindergarten
Law Enforcement Officer
Legal Assistant
Library Technical Ass't
Mail Carrier
Meter Reader
Social Service Aide

Cluster: Transportation

Auto Body Repairer
Automobile Mechanic
Air Traffic Controller
Bus Driver
Flight Attendant
Flight Engineer
Service Station Attendant
Pilot
Traffic Agent
Truck Driver

Appendix E

41.

OCCUPATION/OBJECTIVE CORRELATION CHART

CLUSTER
Public Service

OCCUPATIONS	OBJECTIVES													
	1						2			3		4		
	1.1	1.2	1.3	1.4	1.5	1.6	2.1	2.2	2.3	3.1	3.2	4.1	4.2	4.3
Social Service Aide		X					X			X			X	
Guards and Watchmen	X								X	X				X
Mail Carrier					X				X		X	X		
Firefighter	X						X			X		X		
Armed Forces			X						X	X			X	
Library Assistant					X		X				X		X	
Legal Assistant				X				X			X	X		
Elementary Kindergarten & Teachers						X	X			X		X		
Meter Reader					X				X	X				X
Law Enforcement Officer					X		X			X		X		

Appendix F

DEPARTMENT OF PUBLIC INSTRUCTION

STATE OF NORTH CAROLINA RALEIGH

July 12, 1976

MEMORANDUM

TO: Superintendents of Local Education Agencies and Local Directors/ Planners of Occupational Education

FROM: Rod Whitley, Tarboro City Schools
Jake Boyce, Edenton-Chowan Schools
Jesse S. Clemmons, State Department of Public Instruction

SUBJECT: NOTIFICATION OF MIDDLE GRADES OCCUPATIONAL EXPLORATION CURRICULUM FIELD-TESTS DURING 1976-77

APPLICATION DEADLINE: JULY 23 1976

During the 1976-77 school year we will be field-testing curriculum materials developed through occupational education research projects at Tarboro City Schools and at Edenton-Chowan Schools. Both sets of curriculum materials have undergone extensive pilot testing and revision at the project sites. Our preliminary findings indicate them to be highly effective with Occupational Exploration students, grades 7-9.

We encourage you to study carefully the enclosed two program descriptions in light of your current efforts in Middle Grades Occupational Exploration and, if appropriate, nominate a single school from your unit to participate in field-testing the curriculum material. You may nominate more than one school to field-test either, or both, sets of the material.

All nominations received as of July 23, 1976 will be reviewed by a selection committee composed of staff members of the research projects at Tarboro City Schools and Edenton-Chowan Schools, staff members of the State Department of Public Instruction Occupational Research Unit, and staff members of the State Department of Public Instruction Division of Occupational Education. Schools selected to participate in the field-test will be notified as soon thereafter as possible.

Fifteen sites will be selected to field-test the Edenton-Chowan materials - two in each educational district except District I in which only one site will be selected. For field-testing the Tarboro materials, seven sites will be selected - one in each educational district except District III.

Enclosures

TARBORO MATERIALS

In this project, study units and a corresponding teacher guide were developed for Middle Grades Occupational Exploration programs in grades seven through nine. The materials are intended for individual or small group use with these students.

Four basic objectives were used in developing the curriculum. These were - (1) Students will identify and develop their interests, abilities and goals as related to occupational choices. (2) Students will develop positive attitudes toward themselves, others and work. (3) Students will increase their knowledge of job information on which they can act as they consider possible choices. (4) Students will develop the abilities to make decisions, solve problems, and accept responsibilities.

These objectives will be accomplished through the study units involving hands-on activities, problem solving activities, games, and research. These units will be completed in the occupational lab areas, and not in the academic classroom.

The suggested site requirement would ideally be that of a seventh and eighth grade setting with approximately 250 to 300 students at each grade level. There would be four teachers in the following lab settings - service lab, business lab, industrial lab, environmental lab, and an occupational information center.

Field test requirements are as follows:

1. All Middle Grade Occupational Exploration teachers in the field-test school will attend a one-week training session at C. B. Martin Junior High School in Tarboro. This will occur during August with the exact dates to be announced at a later time. Travel and subsistence will be paid. Arrangements are being made for renewal credit of at least 2.0 units.

2. Each field-test school must have no less than the equivalent of two full-time Middle Grades Occupational Exploration teachers involved in a program which has been in operation for at least one year.

3. Each school must be willing to purchase all of the equipment and supplies needed in the study units. Expensive kits and elaborate equipment are not required. All of the equipment is either inexpensive or present in most exploration labs. Core curriculum materials in sufficient numbers will be supplied by the project, such as teacher guides, study units, Hello World! series, Occupational Outlook Handbook, etc.

4. Each teacher is expected to participate in periodic school-based meetings with the field-test coordinator to discuss problems, successes and possible new ideas.

For additional information contact:

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Appendix F (continued)

NOMINATION OF SCHOOL TO PARTICIPATE IN FIELD-TEST

1. LEA _____

2. Name of School Nominated _____

3. Name of Occupational Exploration Teacher(s) Percent of Time in Progra

_____ _____ _____

_____ _____ _____

_____ _____ _____

_____ _____ _____

_____ _____ _____

4. Number of Students in School Nominated

Grade 7 _____

Grade 8 _____

Grade 9 _____

All Grades in School _____

5. Briefly describe the school's organizational structure for delivery of Middle Grades Occupational Exploration (Number of teachers per grade level, clusters covered at each grade level, scheduling in terms of days per week, hours per day, physical facilities, etc.).

6. Which material do you feel could be most appropriately field-tested in this school?

Tarboro Materials _____

Edenton-Chowan Materials _____

Appendix F (continued)

7. Statement of Nomination

I nominate _____ for consideration as a field-test site for testing the _____ materials.
(Tarboro or Edenton/Chowan)

(Signed) _____
Superintendent

(Signed) _____
Local Director/Planner of Occupational Education

(Signed) _____

(Signed) _____

(Signed) _____

(Signed) _____

(Signed) _____
(Teachers)

Return this form no later than July 23, 1976 to:

Jesse S. Clemmons
Occupational Research Unit
Room 510, Education Building
Raleigh, North Carolina 27611

Appendix G

STUDY UNIT EVALUATION

OCCUPATION:

CLUSTER:

NUMBER OF STUDENTS EXPOSED TO UNIT:

NUMBER OF STUDENTS WHICH CHOSE UNIT:

NUMBER OF TEACHERS IMPLEMENTING UNIT:

DIRECTIONS: Rate the statements from 1 to 4, 1 being a definite YES and 4 being a definite NO. Place a check in the appropriate box. If the statement does not apply to this particular unit, enter NA (not applicable) in the spaces provided for the checks.

	YES 1	2	3	NO 4
1. This occupation is a valid representation of an occupation in this cluster.				
2. The learning experiences are representative of actual job tasks.				
3. The learning experiences are workable for individual use.				
4. The learning experiences are workable for group use.				
5. The learning experiences meet the overall objectives of occupational exploration.				
6. The unit is adaptable for disadvantaged, low ability and handicapped students.				
7. The unit is interesting enough for high ability students.				
8. The directions are clearly stated.				
9. The readability level of the unit is average.				
10. The game used in this study unit served well as a teaching aid.				
11. The majority of students chose to play the game over the other experiences.				
12. The Hello World Series provided adequate job information.				
13. The Occupational Outlook Handbook provided adequate job information.				
14. The study unit is workable for a low-budget.				

	YES 1	2	3	NO 4
15. The answer sheet affectively evaluates pupil progress on the study unit.				
16. The students were able to work through the unit with a minimum of teacher assistance.				
17. An orientation was used prior to the introduction of the unit.				
18. The equipment necessary for this unit is readily attainable.				
19. The teacher's guide offers all additional information for this unit.				
20. The positive attitude sheets exemplify necessary attitudes related to work.				

If you feel that an alternate experience would be beneficial to the unit, please state below.

Please list any corrections, whether grammatical or structural. Explain completely.

Please list any unnecessary tools, materials and equipment.

CLUSTER: HEALTH

OCCUPATION: HOSPITAL ATTENDANT

Do you like helping people who cannot help themselves? Hospital attendants bring food to patients, make beds, and keep patients clean and comfortable. Let's learn about this important health career.

OBJECTIVES

Upon completion of the experiences in this study unit, you will be able to:

I. answer the job information questions about a hospital attendant.

II. identify the abilities needed by a hospital attendant.

III. identify the responsibilities needed by a hospital attendant.

IV. illustrate good attitudes needed by a hospital attendant by completing cartoon situations.

I. Let's learn more about this job.

Step 1 Choose two of the following ways to learn about hospital attendants.

a. read the hospital attendant article in Hello, World! Health Services.

b. watch a filmstrip on hospital attendant.

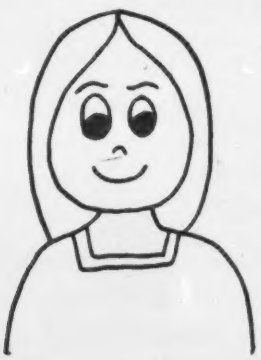
c. read the article on this occupation in the Occupational Outlook Handbook.

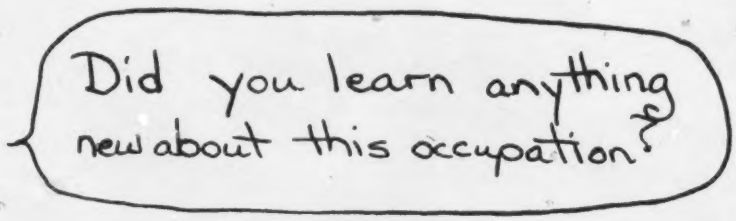
Step 2 Get the Pick-A-Pair game board and cards. Play the game according to the directions given to you by the teacher.

Step 3 Answer these questions when you finish the game.

JOB INFORMATION QUESTIONS

1. Name 4 duties of a hospital attendant.
2. How are you trained for this job?
3. Where could you work as a hosptial attendant?
4. What are the educational requirements for this job?
5. Name one thing which you enjoy about this job.





II. Hospital attendants need several abilities to perform their job well. They need to be able to get along with people and use common sense or good judgement in emergencies. They need to be able to work well with their hands and they need a good menory to report their observations of the patients. Let's see if you can identify some of these abilities in yourself. Complete both Learning Experience A and Learning Experience B. You may choose to do Learning Experience C if you like.

LEARNING EXPERIENCE A

In this experience, you will make an empty hospital bed.

Step 1 Read pages 225-229 in the Red Cross Home Nursing Textbook.

Step 2 Get 2 clean sheets, a bedspread and a pillowcase.

Step 3 Make the bed using the directions in the Home Nursing Textbook. Make sure you complete each step before going to the next step.

Step 4 When you finish, call the teacher to evaluate your work.

LEARNING EXPERIENCE B

In this experience, you will make a hospital bed with a patient in it.

Step 1 Read pages 230-232 from the Home Nursing Textbook.

Step 2 Get 2 clean sheets and a classmate to act as a patient.

Step 3 Follow the directions for changing a bed with a patient in it. You will change only the flat bottom sheet, uning the second sheet as your clean sheet. Make sure you follow all steps carefully.

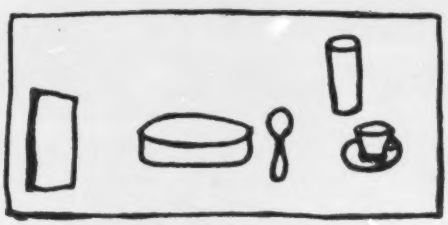
Step 4 Ask your teacher to observe you while you change the sheet.

LEARNING EXPERIENCE C

In this experience, you will feed a helpless patient.

Step 1 Read pages 233-235 in the Red Cross Home Nursing Textbook.

Step 2 Get a tray, spoon, cup, saucer, napkin, glass and soup bowl. Arrange the tray according to the diagram below.



Step 3 Get a partner to be your patient. Ask your patient to lie on the hospital bed. Raise upper end of the bed to near sitting position.

Step 4 Follow the instructions you read in the Home Nursing Textbook.

Step 5 Ask the teacher to observe you while you feed the patient.

Step 6 Answer the rating form on your Answer Sheet.

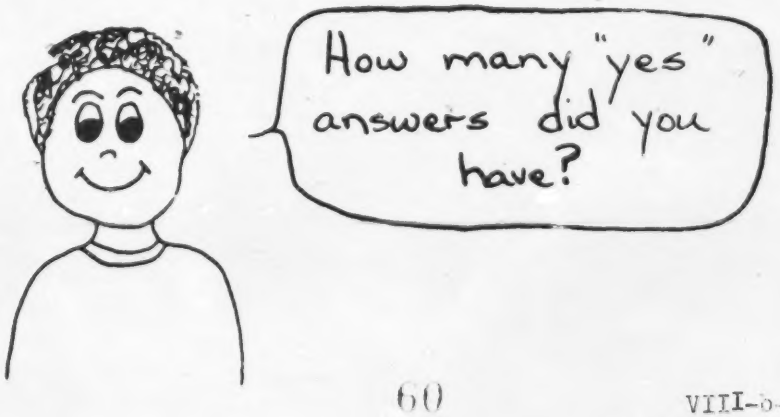
III. Hospital attendants have many responsibilities. Let's see how wel you feel you could carry out these responsibilities.

Step 1 Answer the following questionnaire on your Answer Sheet.

RESPONSIBILITY QUESTIONNAIRE

1. Would you take a little extra time to feed a patient who had an operation on his arm?
2. Could you carefully bathe a nervous and irritable person who was about to have an operation?
3. Could you gently change a gown on an unconscious patient?
4. Could you change the sheets on a bed where a patient was receiving glucose intravenously?
5. Would you make sure each patient had an accurate temperature reading?
6. Would you massage a person's back who had been in bed a week, even though you were busy?
7. Would you make sure the elderly patients were exercised properly each day?
8. Would you make sure messages were delivered promptly?
9. If a patient couldn't walk, would you help him get around in a wheel chair?
10. Could you carefully lift people in and out of bed?

If you answered yes to most of these questions, you could be responsible enough to do well as a hospital attendant.



IV. Do you enjoy working with all kinds of people?

Step 1	Review the section on attitudes toward others from the Positive Attitude Sheet.
Step 2	Look at the cartoon situations on your Answer Sheet and write how you would answer each.
Step 3	Show your completed Answer Sheet to the teacher.